Soldiers





Amy Alators 50 Sea

Story by SFC Brenda Benner

LYING military aircraft requires high-octane confidence; a confidence that outsiders sometimes mistake for cockiness. Even among the close fraternity of aviators who wage war from the sky, there's a subtle rivalry.

But the one thing most pilots will admit, whether their wings are Army silver or Navy gold, is that it takes guts to land military aircraft on a heaving steel flight deck as it rides the ocean's waves.

Once the private domain of Navy and Marine Corps aviators, the

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challenging world of aircraft carriers is rapidly becoming an environment Army pilots must learn to negotiate.

Black Hawk pilots and crew members from the Texas Army National Guard recently experienced first-hand the basics of carrier landings and the special challenges of life aboard the USS *Constellation* during a Joint Shipboard Helicopter Integration Process, or JSHIP, test off the coast of California.

The Texas soldiers trained for two weeks under the guidance of Navy and Army aviators and program evaluators — and under the curious, watchful eyes of the carrier's crew.

The Guard soldiers "flew" simulators, practiced water-survival skills in a swimming pool, and became comfortable landing on *Constellation's* moving target of a deck — even in darkness.

Recent U. S. joint and combined operations, including those under the auspices of the United Nations and NATO, have demonstrated an increased dependency on U.S. Navy vessels, and Army CW3 Philippe A. Catoire, who evaluates joint

operations training, said that missions are becoming more complex.

"Unified commands have multifaceted missions, not just Army, Navy or Air Force operations," Catoire said. "That means all forces must be capable of working together."

But considering the enormous variety of high-tech military equipment, procedures, tactics — and branch-specific jargon — operational deficiencies are likely to exist.

The Department of Defense, through the Office of the Secretary of Defense's Joint Test and Evaluation Office, is exploring a new approach to this challenge with JSHIP.

Created in the summer of 1998, the four-year-long Joint Test and Evaluation Force program will study the interoperability of all branches of service as they interact with naval operations. While crews from across the active and reserve components of all the services are participating, Army National Guard units are often more likely to be available or in close geographical proximity for the tests.



The program evaluates safety and compatibility of helicopters with ships, and provides all-inclusive procedures and training for both the embarking units and the host ship's crew. Lessons learned will drive the rewriting of field manuals and related publications concerning training and doctrine.

A major goal is to increase operational readiness and operational flexibility within joint service missions.

Catoire, the JSHIP program's compatibility division chief, not only shares his knowledge of shipboard operations with Army pilots and crews, but also encourages feedback from everyone involved.

"There are many unique dangers with landing on a floating airport, especially when it doesn't have normal airport rules or procedures," he said.



Army SGT Deadrick Ramirez uses long-range binoculars to scan the sea around Constellation for ships and aircraft.

SGT David Polinsky





"Non-Navy pilots must also get accustomed to the severe wind turbulence coming off these superstructures — it's difficult for even seasoned pilots to master."

Catoire said one of JSHIP's goals is not only to determine what it takes for another service's aircraft to land on a vessel, but also what it takes to maintain the aircraft, conduct operations and live on board.

Cdr. Bret Gary, JSHIP's Navy deputy test director from Patuxent River Naval Air Station, Md., said that the need for the JSHIP program grew out of experiences in Haiti, Grenada, Panama and Somalia.

Black Hawk pilot CW5 Craig Roberts begins his approach to Constellation's flight deck, a moving target in the vast sea.

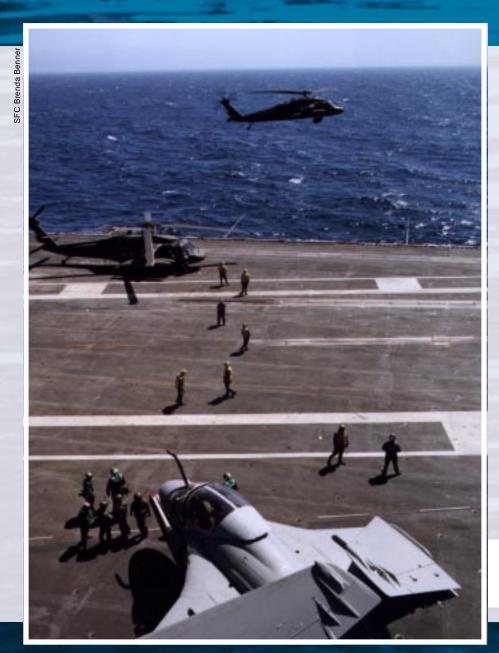
Navy crewmembers scrub down *Constellation's* deck during a lull in flight operations. The raised deck sections are jet-blast deflectors.

One of JSHIP's goals, he said, is to capture and document lessons and make them available to the war fighters for use in crisis situations.

"We had Air Force and Army special operations helicopters deployed from our ships in the past," said Gary. "We found that it was not as easy as just landing on the ships. The Navy uses different equipment for refueling and maintenance, different procedures and lingo, and the UH-60 Black Hawk helicopters, for example, were not designed for sea operations. But they must be able to function in a corrosive saltwater environment and an intense electromagnetic environment. There is no place on Earth with higher concentrations of EM energy than on Navy ships.

"Non-Navy pilots must also get accustomed to the severe wind turbulence coming off these superstructures—it's difficult for even seasoned pilots to master."

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"Once we solve the interservice compatibility shortcomings, it will become much easier for joint services to go to sea and fight those battles," Gary said.

Fighting those battles demands different kinds of aviation assets than the Navy possesses.

"There are not enough Navy helicopters to perform large-scale combat assaults," said COL James Looney, the Texas National Guard's state aviation officer. "We are writing tactics to get all of our modernized helicopters — including Apaches, Chinooks and, eventually, Comanches — onto the smaller amphibious carriers as well. That's the way we're going to get to the fight."

Many Army aviators will eventually have aircraft carrier landing bragging rights, but until then the CH-47 pilots and crewmembers from the Texas Guard's Company G, 149th Aviation Regiment, can claim to be among the first to acquire such experience.

Wings folded, a Navy A-6 Intruder sits to one side of *Constellation's* flight deck as one UH-60 leaves the ship and another prepares for takeoff.

Brother Hawks

They usually fly in different skies, but Army and Navy Hawks are birds of a feather.

AWKS frequently navigate the skies during Navy and Army operations: Man-made military hawks — powerful and agile like their feathered namesakes.

Be it the Navy's SH-60 Sea Hawks or the Army's UH-60 Black Hawks, these multi-use aircraft are similar in appearance, but have many different operational features.

UH-60 Black Hawk helicopters, fielded by the Army in 1979, have proven themselves as versatile and dependable aircraft during medical evacuation, drug interdiction, disaster relief, combat support and peacekeeping missions.

The Sikorsky Aircraft Corporation has supplied more than 1,500 Black Hawks to active-duty and reserve-component units worldwide.

The upgraded UH-60L Black Hawks now in use have increased power and lifting capabilities, extended fuel ranges and flight-control components derived from the Sea Hawk. The UH-60L can sling load 9,000 lbs. of additional cargo and,

with additional fuel tanks, can extend its range to nearly 1,100 nautical miles.

Sea Hawks, the Navy's equivalent multipurpose helicopters, deploy from cruisers, destroyers, frigates and aircraft carriers.

The Navy received its SH-60Bs in 1983, and the more advanced SH-60F Sea Hawks in 1988.

Sea Hawks are used for search and rescue, anti-ship and anti-submarine warfare, drug interdiction and special operations. They also greatly The Chinook crews experienced their own JSHIP training off the Virginia coast aboard the USS *Saipan* in November 1999.

SSG Lisa A. Webb, a crew chief for Co. A, 449th Avn.
Support Battalion, said she knows of few Army aviators who get this kind of opportunity.
Webb has twice the bragging rights — she landed on an aircraft carrier years ago while flying with the 228th Avn. Bn. in Panama.

"I feel special, in a way, because we're paving a new road for joint services to work together," she said. "We're setting the standards and modifying the way we operate aboard ships."

Webb guided the maintenance crews through "bladefolding" procedures, in which the rotor blades are repositioned, overlapping one another over the tail of the helicopter.

Unlike some Navy helicopters, which have power-operated blade-folding capabilities, the Black Hawk's rotor assemblies must be partially disassembled.

Blade folding allows more helicopters to fit in the tight confines of carrier decks and hanger bays. Earlier, the water-hazard-training portion of the program provided a much more intense learning experience. During the training, flight crewmembers were suspended upside down in the training pool while breathing from small bottles of compressed air and exhaling through their noses. They said that it's more difficult than it seems.

"I must have gotten six gallons of water up my nose," said CPT Robert F. Gale, a UH-60L Black Hawk pilot. "It's impossible to avoid it. I was one of the first ones to come up gasping. Everything else was 'cake' compared to the pool."

The grand finale is the "dunker," a barrel-shaped mock-up of a helicopter fuselage. In this training, crews are strapped into the simulator, which is dropped into the pool. Then they must wait — as the fuselage rolls upside down and sinks — before executing their evacuation procedures, all the while battling the urge to panic.

The training difficulty is magnified when wearing black-

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Crew chief SSG Lisa A. Webb cleans built-up salt spray from her aircraft's windows. Spray is unavoidable during shipboard operations.

extend a vessel's radar and sonar range.

Both aircraft require crews of three to four people and have maximum cruise speeds near 180 knots, equivalent to 207 miles per hour.

On crowded aircraft carrier decks, space is precious. The length of an SH-60F Sea Hawk, equipped with power-assisted folding blades and a folding tail, can decrease to approximately 41 feet from its original operating length of 65 feet, while Black Hawks take up nearly 53 feet after

their blades are manually folded.

Sea Hawks, with their rear landing gear closer to the fuselage's center, have a shorter wheelbase, and thus a tighter turning radius on deck.

Although the Army's Black Hawks were not designed for shipborne operations, continued cooperation among the services during testing programs such as JSHIP can increase the frequency in which they join the Sea Hawks over water.

— SFC Brenda Benner



An Navy SH-60 carries supplies from a transport to the carrier during a vertical replenishment, or "vertrep," operation.

SGT Deadrick Ra

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Before carrying out their carrier qualifications the Army crewmembers underwent the water-survival training required of all shipborne aviators.

out goggles to achieve a "blind" evacuation.

"The water hazard training is an eye-opener for everyone," Webb said. "It makes us think about how we'll react if we hit the water. 'What can I use to stay afloat? What will my body go through while I'm in the water?' This training is critical."

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For CW5 Terry Kennemer, the Texas Army Guard's aviation safety and standardization officer, the water-survival training — required for shipboard operations — was a first.

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"It's not easy," said Kennemer. "It takes a lot of effort to jump off a tower with 40 pounds of flight gear strapped to us and swim the required 100 yards with it. The gear itself doesn't

float. This certainly builds our confidence."

According to Gary, the Texas aviators adapted to the world of Navy aviation very quickly.

"I see no difference between the National Guard units and the regular Army units we've trained with," he said. "My hat is off to them. They proved they could operate in this new and challenging environment."





A Texas Army National Guard Black Hawk is moved from Constellation's cavernous hangar bay onto the huge deckedge elevator that will lift it to flight-deck level.

Crew chief 1SG Victor DeLeon reattaches the blades to a UH-60's main rotor head after completing a blade-folding task in the hangar bay.